

TEACHERS ACCEPTANCE OF MOBILE LEARNING FOR TEACHING AND LEARNING IN ISLAMIC EDUCATION: A Preliminary Study

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ABSTRACT

This study was conducted to investigate the perceptions of the religious teachers' readiness to use mobile phones as m-learning. The focus of the study is to examine some aspects namely;

- **types of handset used;**
- **the use of mobile applications,**
- **mobile learning activities, and;**
- **the acceptance of mobile phones in teaching and learning. The targeted population was the religious teachers from Putrajaya, Selangor.**

The purposive sampling technique was used to gather data from 32 religious teachers from five secondary schools. Data were collected via questionnaires based on Likert-five-point scales. The data were tabulated, analyzed and interpreted using descriptive findings to find the frequency distribution and percentage. Research findings revealed that religious teachers are exposed to learning activities using mobile phones, and they are ready to make mobile phones as m-learning.

Keywords: M-learning, mobile phones, Islamic Education, teaching and learning

INTRODUCTION

M-learning or mobile learning is relatively new field in research and exploration by many researchers around the world. It offers a way of learning new techniques to improve the mastery of knowledge in society. The mechanism of m-learning includes the use mobile devices like mobile phones, iPad, Personal Digital Assistants (PDAs) and Tablet PC. This creates a method of learning a lot different from conventional methods commonly used in teaching and learning.

Mobile devices such as mobile phones, PDAs, and tablets such as iPad are more popular and attractive among consumers due to several factors. Among the factors that attract the attention of consumers is the price of portable devices much cheaper than the computer, more durable and suitable for obtaining information quickly; attractive design, and suitable for incorporation in extracurricular activities (Black & Hawkes, 2006). This shows that the trend of learning through mobile devices is a current trend in future learning.

Other factors such as the increase of mobile phone users also have a positive impact on the use of m-learning method. During the year 2010, a total of 7.5 million units of mobile phones were sold in Malaysia, and smart phones is a major contributor in the sale. This shows that there was an increase of 30% from the previous year (daily news online, February 17, 2011). Statistics issued by the SKMM (Malaysian Communications and Multimedia Commission) also proves that the use of mobile phones in Malaysia until 2009 as in Table: 1.

Table 1
Mobile phone used from 2007-2009. (Source: SKMM 2009)

Age	Percentage of use (%)		
	2007	2008	2009
Teenage (19 years)	14.5	24.4	14.7
Adult (20-49 years)	74.9	62.5	73.4
Elderly (>50 years)	10.5	13.1	11.8

LITERATURE REVIEW

The term m-learning is a result of the distance learning method (d-learning) and electronic learning (e-learning) (Brown, 2005; Keegan, 2005). It is an expansion of the idea of learning which offers consumers more flexibility and mobile-ness. The word "learning" itself actually means mobile or mobility in which learning can happen anywhere and at any time (Vavoula & Sharples 2002). This gives a new dimension to education where the m-learning method is convenient for users to learn in a more flexible manner.

Advances in technology aspects also have given a big impact on education. Education process is no longer concentrated on one platform, such as in the formal classroom orientation (Mohd Aliff et al., 2012). M-learning is more independent learning (self-learning) which only requires mobile

equipment such as personnel data assistants (PDA), Palm Talk, Smartphone, iPAQ and Pocket PC to access the information to name a few (Wagner, 2008).

Portable equipment makes m-learning possible at any time, and any place compared to the use of a notebook that can easily be damaged and does not last long (Ahmad Sobri, 2010).

M-learning method has been practiced in developed countries like Europe and the United States (Ahmad Sobri, 2010). In Malaysia, m-learning is relatively at infant stage. Study of m-learning in Malaysia must be intensified as what researchers in other part of the word are conducting various studies and testing for its effectiveness in learning. The use of m-learning is small portion compared to the use of e-learning and d-learning which have become affective medium of teaching nowadays. However, the existence of m-learning provides more opportunities for consumers to be more focused on learning without interference from others.

Although the use of m-learning in Malaysia is still early, many studies in the country have been conducted to understand to what extent the use of m-learning can have an impact on teaching and learning. Among the earlier studies related to m-learning done in Malaysia, include the study of secondary school curriculum design (Ahmad Sobri, 2010), studies on the subject of History (Syafiza, 2007), Mathematics subject (Saipunidzam et al., 2010), Science (Dewitt & Saedah Siraj 2010), handwriting recognition application (Noor Azam et al., 2010) and Muslim market application (Norleyza, 2008).

METHODOLOGY

This is a preliminary study and first part of development in m-learning module for religious teachers. There are five processes in the study of m-learning module development using the ADDIE model: (1) Review the analysis of mobile phone use among the teachers of Islam (2) The process of designing m-learning modules, (3) process of m-learning module development, (4) The implementation of m-learning modules; (5) The evaluation process of m-learning modules.

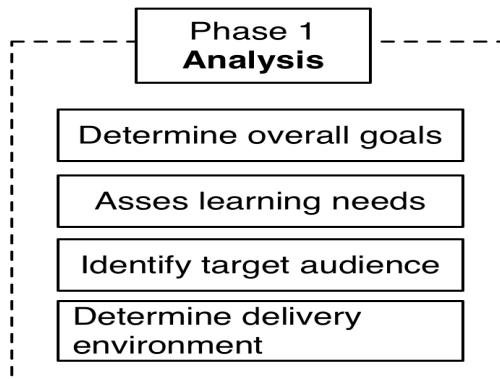


Figure: 1
Phase analysis

A total of 32 Islamic Education teachers are involved in this study. They were asked to answer a questionnaire relating to the readiness of the use of mobile phones as learning tools. Questionnaires distributed to religious teachers are divided into several parts:

- **Demographics - to know the background of teachers.**
- **Phone type - to know what type of phone used.**
- **The use of mobile phones - to know the term mobile phone use and the applications used.**
- **Learning activities - to know what teachers' perception towards mobile phone use in teaching and learning.**
- **The level of readiness - to know the teachers' readiness to use mobile phones as learning tools.**

Information resulting from this study (needs analysis) is important because the findings will be used to assist in the subsequent review of the m-learning module development for the religious teachers.

FINDINGS

A total of 32 religious teachers were selected to answer the questionnaires. The data were collected and analyzed descriptively using Statistical Package for the Social Sciences (SPSS) software.

Demographics & Mobile Phone Type

Figures: 2 and 3 show the overall demographics of the respondents' age and type of handset used.

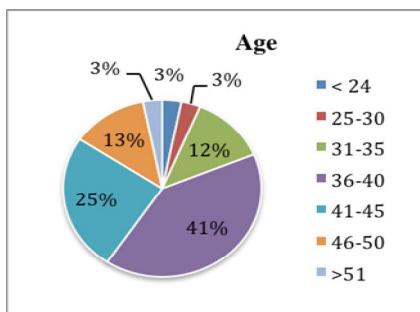


Figure 2: Age

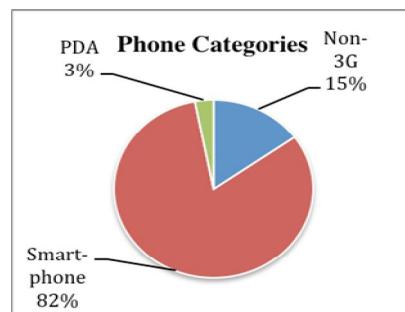


Figure 3: Phone

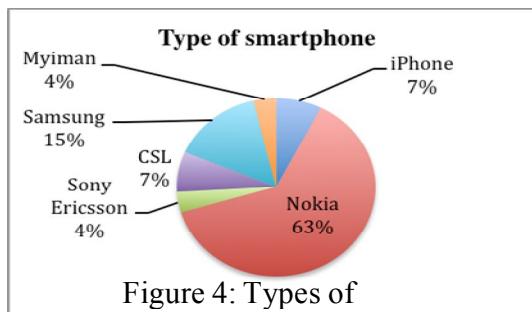


Figure 4: Types of

Figure: 2 depicts the respondents' ages ranging from men to women. Respondents aged 36-40 years was the largest number of respondents in this study, representing 41%, followed by the number of respondents aged 41-50 by 25%, while respondents aged 45-46 years and 31-35 years respectively were 13% and 12%. Respondents aged less than 30 years and 51 years are at least 3%. **Figure: 3** shows the categories of mobile phones used by the respondents. Smart phones (smartphone) are the most mobile categories used by the respondents (82%). While normal phones are still used by the respondents (15%), PDA phone users were with the lowest recorded score that is 3%. **Figure: 4** details the types of smart phones used by the respondents. Nokia branded mobile phones are the most numerous types used by the respondents (63%). Respondents who use Samsung mobile phones are 15%, while phone users using iPhone and CSL respectively 7% and Sony Ericson branded mobile users, and Myiman is the lowest consumer of 3%.

The Use of Mobile Phone Application

Table 2 shows the use of mobile applications within 24 hours. The most common application used by the religious teachers is a gallery picture (80%) while the least used application is Internet access (40%). Other applications such as video cameras, writing notes, reminders, Bluetooth and MP3/MP4, received a moderate score ranging 55% to 75%.

Table: 2
The Use of Mobile Phone Application (n=32)

Application	Scale	Frequency (f)	Percent (%)
Picture Gallery	Never	12	9.4
	Seldom	2	6.3
	Usually	26	81.3
	Always	1	3.1
Video Camera	Never	3	9.4
	Seldom	6	18.8
	Usually	19	59.4
	Always	4	12.5
Taking Notes	Never	4	12.5
	Seldom	2	6.3
	Usually	6	18.8
	Always	20	62.5
Reminder	Never	3	9.4
	Seldom	24	75.0
	Usually	3	9.4
	Always	2	6.3
Bluetooth	Never	4	12.5
	Seldom	9	28.1
	Usually	17	53.1
	Always	2	6.3
MP3/MP4	Never	4	12.5
	Seldom	10	31.3
	Usually	17	53.1
	Always	1	3.1
Internet Access	Never	6	18.8
	Seldom	1	3.1
	Usually	10	31.3
	Always	15	46.7

Learning Activities in Mobile Phones

Figure 7 shows a number of learning activities in a mobile phone within 24 hours. Three main activities of learning most often used in mobile phones are discussing the assignment p & p (71.9%), SMS to the teacher / student (75%) and received the order p & p (75%). Video and voice recording activities p & p moderation scored 40.6% while the activities of editing word documents, received the lowest score (9.4%).

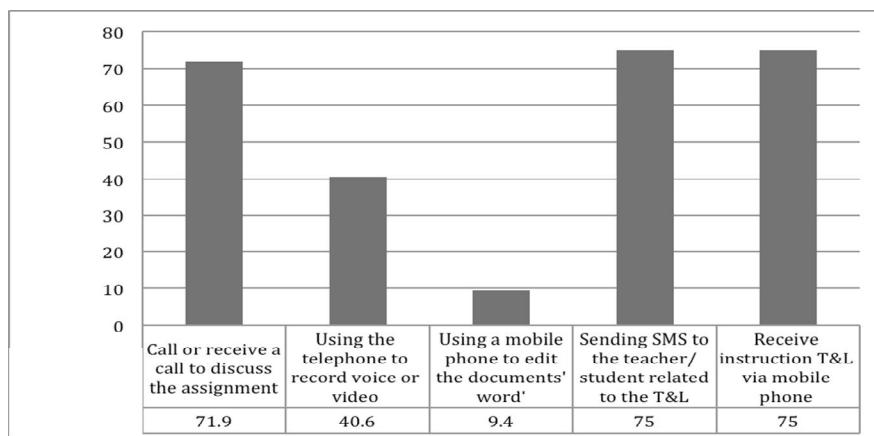


Figure: 5
Learning Activities in Mobile Phones

Level of Acceptance of Mobile Phones in Teaching and Learning

Table 1 shows the level of acceptance of the Islamic Education teachers on the use of mobile phones in teaching and learning. A total of 96.9% of respondents would like to learn at anytime and anywhere. While 93.8% of respondents want to do enrichment activities in spare time. However, 9.4% of the respondents did not agree to make mobile phones as a tool for teaching and learning. However, the findings showed that 96.9% of respondents were willing to use m-learning material provided in the form of mobile technology.

Table: 3
Level of acceptance of mobile phones as learning tools

Item	Percentage	
	YES	NO
I would like to learn anytime, anywhere	96.9	3.1
I want to do enrichment activities in leisure	93.8	6.3
I want to make mobile phones as a tool for teaching and learning	90.6	9.4
I am willing to use m-learning in Islamic Education	96.9	3.1

DISCUSSION & CONCLUSION

This study is generally to see to what extent the religious teacher's readiness to use mobile phones as learning tools. After the study data were recorded and analyzed, the findings showed that the religious teachers had positive attitudes toward the use of mobile phones as learning tools.

Religious teacher actually had expertise in using mobile phones in their daily life (see Table 2). In fact, the findings in Figure 5 shows the religious teachers use learning activities in their mobile phones. In addition, the finding of high scores (table 1) also shows that the religious teachers are prepared to make the mobile phone as m-learning in their life. This indicates that m-learning method has high potential to be adapted in teaching and learning in religious education.

This study is consistent with previous studies (Muhammad Ridhuan & Saedah, 2010; Mohd Aliff & Mohd Isa, 2014) which show that there is potential for m-learning produced for Islamic Education in secondary schools. Although this study only opt religious teachers as samples and may differ in other areas of teaching, but it provides an initial overview to the researcher on mobile phone use among religious secondary school teachers. The proposal to produce m-learning modules in religious education should be realized and that the m-learning modules that will be produced can be a reference for teachers as well as students at any time and everywhere

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REFERENCES

Ahmad Sobri Shuib. (2010). Reka Bentuk Kurikulum M-Pembelajaran Sekolah Menengah: Teknik Delphi. Proceedings of Regional Conference on Knowledge Integration in ICT 2010. pp, 652-665.

Black, J & Hawkes, L. (2006 July 3-6). A Prototype Interface for Collaborative Mobile Learning. *IWCMC'06. Proceedings of the 2006 international conference on Wireless communications and mobile computing*. Vancouver.

Brown, T. H. (2005). Towards a model for m-learning in Africa. *International Journal on E-Learning* 4(3), 299-315. Retrieved from <http://www.editlib.org/p/5082>

DeWitt, D & Saedah Siraj. (2010). Learners' Perception of technology for design of a collaborative m-learning module. *World Journal on Educational Technology*. 2(3), 169-185. Retrieved from http://www.world-education-center.org/index.php/wjet/article/view/172/pdf_29

El-Hussein, M. O. M., & Cronje, J. C. (2010). Defining Mobile Learning in the Higher Education Landscape. *Educational Technology & Society*. 13 (3), 12–21. Retrieved from http://www.ifets.info/journals/13_3/3.pdf

Keegan, D. (2005). The Incorporation of Mobile Learning Into Mainstream Education and Training, mLearn 2005, 4th World conference on mLearning. Cape Town, South Africa. 1-17.

Mohd Aliff Mohd Nawi & Mohd Isa Hamzah. (2014). Mobile Fatwa (M-Fatwa): The Integration of Islamic Fatwa Through Mobile Technology. *Turkish Online Journal of Distance Education*, 15 (2), 108-116. Retrieved from https://tojde.anadolu.edu.tr/tojde56/pdf/article_9.pdf

Mohd Aliff Mohd Nawi, Ezad Azraai Jamsari, Mohd Isa Hamzah, Adibah Sulaiman & Azizi Umar. 2012. The Impact of Globalization on Current Islamic Education. *Australian Journal of Basic and Applied Science*, 6 (8), 74-78 Retrieved from <http://www.ajbasweb.com/ajbas/2012/August/74-78.pdf>

Muhammad Ridhuan Tony Lim Abdullah & Saedah Siraj. (2010). M-Learning Curriculum Design for Secondary School: A Needs Analysis. *World Academy of Science, Engineering and Technology*. 66:1638-1643. Retrieved from <http://waset.org/publications/10646/M-Learning-Curriculum-Design-for-Secondary-School:-A-Needs-Analysis>

Noor Azam Z, Wan, F. Wan, A. & Mohd, H. H. (2010 Jun 15-17). Mobile-Based Interactive Learning Using Handwriting Recognition Malaysia. International Symposium in Information Technology, Kuala Lumpur. Retrieved from <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=5561311>

Norleyza Jailani, Ahmed Patel, Noor Faezah Mohd Yatim, Yazrina Yahya, Muriati Mukhtar, Zuraidah Abdullah, Marini Abu Bakar, Mazliza Othman, Salha Abdullah. (2008 June 22-24). A Mobile Agent-based E-marketplace Model For the Muslim Community. *Proceedings of the ICKBD 2008 Madinah, Saudi Arabia*. 271-277.

Saipunidzam Mahamad, Mohamad Noor Ibrahim & Shakirah Mohd Taib. (2010). M-learning: A new paradigm of learning mathematics in Malaysia. *International Journal of Computer Science & Information Technology (IJCSIT)*, 2(4): 76-86. Retrieved from <http://arxiv.org/pdf/1009.1170.pdf>

Shahrizan Salian. (2010 Oktober). 7.5 juta telefon bimbit dijual 2010. Berita Harian, 17 Februari http://www.bharian.com.my/articles/7_5jutatelefonbimbitdijual2010/Article

Suruhanjaya Komunikasi dan Multimedia Malaysia. Statistical Bried Number Nine Hand Phone User Survey 2009. Cyberjaya: Suruhanjaya Komunikasi dan Multimedia Malaysia.

Syafiza, A. W. (2007). Mobile Learning Notes for SPM Sejarah: Islam di Asia Tenggara. Latihan Ilmiah. Fakulti Teknologi dan Komunikasi Maklumat. Universiti Teknikal Malaysia Melaka.

Traxler, J. (2007). Defining, Discussing, and Evaluating Mobile Learning: The moving finger writes and having writ. *International Review of Research in Open and Distance Learning*. 8(2), 1492-3831 <http://www.irrodl.org/index.php/irrodl/article/view/346/875>

Vavoula, G., & Sharples, M. (2002). KLeOS: A personal, mobile, knowledge and learning organisation system. IEEE International Workshop on Mobile and Wireless Technologies in Education, Sweden. Retrieved from <http://portal.cetadl.bham.ac.uk/lists/publications/attachments/35/wmte02v.pdf>

Wagner, E., D. (2005). Enabling Mobile Learning. *Educause Review*, 40(3), 40-53. Retrieved from <https://net.educause.edu/ir/library/pdf/erm0532.pdf> www.informationweak.com